

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III 1650 Arch Street Philadelphia, Pennsylvania 19103-2029

Mr. Tom Braithwaite, President TWB Designs Inc. 762 Book Road West Ancaster, ON L9G 3L1

MAR 2 6 2014

Dear Mr. Braithwaite:

We have received your letter requesting the U.S. Environmental Protection Agency's (EPA's) concurrence that Federal solid waste combustion regulations do not apply to TWB Designs Inc.'s (TWB) environmental Mobile Ammunition Combustion System (eMACS). Along with your letter, you provided supplemental information regarding your position that the eMACS is a materials recovery facility which combusts waste for the primary purpose of recovering metals, and is therefore excluded from being defined as a "solid waste incineration unit" under the Clean Air Act (CAA).

The eMACS is a portable unit designed to recover lead and brass from live and expired ammunition via combustion. Propane-fueled primary and after burners operate between 850 and 1750 degrees Fahrenheit, respectively. At these temperatures the lead is melted and flows into a container below the primary burner, while the brass shells remain in the loading tray. Recovered lead and brass from the unit is taken to a third party (usually automotive or scrap metal recycling facilities) for recycling. No further processing is done by the eMACS unit or TWB.

TWB has been in discussions with EPA regarding the eMACS and potential applicability to regulations promulgated under CAA Section 129. Section 129 regulates the combustion of solid waste, and requires EPA to establish standards of performance for each category of solid waste incineration unit. Section 129(g)(1) specifically excludes "materials recovery facilities (including primary and secondary smelters) which combust waste for the primary purpose of recovering metals" from the definition of "solid waste incineration unit". EPA has also codified this definition in certain subparts of 40 CFR Parts 60 and 62 for solid waste incineration units.

While CAA Section 129 provides an exemption for materials recovery facilities which combust waste for the primary purpose of recovering metals, the term is not defined in statutory or regulatory text. Therefore, these are case-specific determinations based on an assessment of each particular facility's operations. From the information provided to EPA and summarized below, EPA agrees with TWB's assessment that the eMACS is a materials recovery facility which combusts waste for the primary purpose of recovering metals, and is therefore not a solid waste incineration unit, as that term is defined in the CAA. EPA evaluated the eMACS only for the combustion of small arms ammunition of 50 caliber or less. Combustion of any other waste material could invalidate the determination that the eMACS is not subject to CAA Section 129 requirements.

According to information you have provided, the eMACS system is a batch process that has the capability to burn 60 lbs/hr of up to 50 caliber ammunition. A 60 pound batch will yield 35 lbs. of lead and 23 lbs. of yellow brass, for a metals recovery rate of 96.6%. This recovery rate supports the determination that the eMACS is a materials recovery facility that combusts waste for the primary purpose of recovering metals. Your letter also claims that significant funds are generated from the separation and recycling of the metals. Claims that your business model relies on the sale of recovered metals could augment a finding that the primary purpose of the eMACs is metals recovery, however there was insufficient information provided on the extent of TWB's reliance on sales of the recovered metal. Consequently, EPA did not rely on this claim to support our determination that the eMACS is not a solid waste incineration unit.

We encourage you to contact the permitting authority where you intend to operate the eMACS to ensure that the unit is in compliance with all state or local regulations. If you have any additional questions, please contact Ms. Kathleen Cox at (215) 814-2173, or Mr. Mike Gordon at (215) 814-2039.

Sincerely,

Diana Esher, Director Air Protection Division